

compiling member information, including member personal information;
converting the member personal information into unique member fingerprints;
comparing the unique transaction fingerprints to the unique member fingerprints and
producing a list of matching fingerprints; and

5 processing transaction information associated with each of the matching fingerprints.

2. The method as recited in claim 1, wherein the member and non-member personal
information is converted by using a one-way hash function.

3. The method as recited in claim 1, wherein the member and non-member personal
information is comprised of information selected from the group consisting of a credit card
10 number for the member or non-member, a name for the member or non-member, an address for
the member or non-member, a telephone number for the member or non-member, an e-mail
address for the member or non-member, or any other personal identifier for the member or non-
member.

4. The method as recited in claim 1, wherein the member and non-member personal
15 information is identical in format and type.

5. A computer-readable media having instructions for processing member information
provided within a file comprised of member and non-member information, without exchanging
non-member personal information, the instructions for performing these steps comprising:

receiving transaction information, including member and non-member personal
20 information, where the personal information has been converted into unique transaction
fingerprints;

compiling member information, including member personal information;

converting the member personal information into unique member fingerprints;

comparing the unique transaction fingerprints to the unique member fingerprints and
producing a list of matching fingerprints; and

processing transaction information associated with each of the matching fingerprints.

6. The computer-readable media as recited in claim 5, wherein the personal information
5 is converted by using a one-way hash function.

7. The computer-readable media as recited in claim 5, wherein the member and non-
member personal information is comprised of information selected from the group consisting of
a credit card number for the member or non-member, a name for the member or non-member, an
address for the member or non-member, a telephone number for the member or non-member, an
10 e-mail address for the member or non-member, or any other personal identifier for the member
or non-member.

8. The computer readable media as recited in claim 5, wherein the member and non-
member personal information is identical in format and type.

9. A method for determining if a transaction by a member consumer meets requirements
15 provided by a rewards program, the method comprising:

receiving transaction information, including information from the group consisting of
identifying a consumer, information identifying a business and information pertaining to the
purchase of a good or service by the consumer, where the information identifying a consumer
has been converted into unique transaction fingerprints;

20 providing member consumer information, including information identifying a member
consumer;

converting the information identifying a member consumer into unique member
fingerprints;

comparing the unique transaction fingerprints to the unique member fingerprints;
producing a list of matching fingerprints; and
processing transaction information associated with each of the matching fingerprints,
including information identifying a consumer, information identifying a business and
5 information pertaining to the purchase of a good or service by the consumer, wherein transaction
information for non-member consumers is not processed;

determining if the business identified in the transaction information is a member
business; and

if it is determined that the consumer is a member consumer and the business is a member
10 business, determining if the information pertaining to the purchase of a good or service by the
consumer at the business meets the requirement of the rewards program.

10. The method as recited in claim 9, wherein the transaction information includes
information selected from the group consisting of information identifying a consumer,
information identifying a business and information pertaining to the purchase of a good or
15 service by the consumer.

11. The method as recited in claim 9, wherein the information identifying a consumer
and the information identifying a member consumer is comprised of information selected from
the group consisting of a credit card number for the consumer or member consumer, a name for
the consumer or member consumer, an address for the consumer or member consumer, a
20 telephone number for the consumer or member consumer, an e-mail address for the consumer or
member consumer, or any other personal identifier for the consumer or member consumer.

12. The method as recited in claim 9, wherein the information identifying a consumer
and the information identifying a member consumer are identical in format and type.

13. The method as recited in claim 10, wherein the information pertaining to the purchase of a good or service by the consumer at the business comprises information selected from the group consisting of a sales amount, a day of sale, and a time of sale.

14. The method as recited in claim 9, wherein the information identifying a consumer
5 and the information identifying a member consumer are converted into unique transaction fingerprints and unique member fingerprints, respectively, by using a one-way hash function.

15. A method for allowing a consumer to receive benefits associated with an incentive program created by a business, the method comprising:

accepting a registration of a member consumer entitling the member consumer to benefits
10 of the incentive program, the registration including information identifying a member consumer;

converting the information identifying the member consumer into a unique member fingerprint;

receiving transaction information, including information identifying a consumer, where the information identifying a consumer has been converted into a unique transaction fingerprint;

15 comparing the unique member fingerprint to the unique transaction fingerprint and producing a list of matching fingerprints;

processing transaction information associated matching fingerprints and determining if the consumer performed a transaction at a member business; and

rewarding the member consumer in accordance with the benefits of the incentive program
20 if it is determined that the consumer did perform a transaction at the member business.

16. The method as recited in claim 15, wherein the information identifying a member consumer and the information identifying a consumer is comprised of information selected from the group consisting of a credit card number for the consumer or member consumer, a name for

the consumer or member consumer, an address for the consumer or member consumer, a telephone number for the consumer or member consumer, an e-mail address for the consumer or member consumer, or any other personal identifier for the consumer or member consumer.

17. The method as recited in claim 15, wherein the information identifying a member
5 consumer and the information identifying a consumer are identical in format and type.

18. The method as recited in claim 15, wherein the transaction information is comprised of information selected from the group consisting of a sales amount, a day of sale, and a time of sale.

19. The method as recited in claim 15, wherein the information identifying a member
10 consumer and the information identifying a consumer is converted by using a one-way hash function.

20. A computer-readable media having instructions for determining if a transaction by a member consumer meets a requirement of a rewards program of a member business, the instructions for performing these steps comprising:

15 receiving transaction information, including information identifying a consumer, where the information identifying a consumer has been converted into unique transaction fingerprints;

providing member consumer information, including information identifying a member consumer;

20 converting the information identifying a member consumer in unique member fingerprints;

comparing the unique transaction fingerprints to the unique member fingerprints;

producing a list of matching fingerprints; and

processing transaction information associated with each of the matching fingerprints,
wherein transaction information for non-member consumers is not processed;

determining if the business identified in the transaction information is a member
business; and

5 if it is determined that the consumer is a member consumer and the business is a member
business, determining if the information pertaining to the purchase of a good or service by the
consumer at the business meets the requirement of the rewards program.

21. The computer readable media as recited in claim 20, wherein the transaction
information includes information selected from the group consisting of information identifying a
10 consumer, information identifying a business and information pertaining to the purchase of a
good or service by the consumer.

22. The computer-readable media as recited in claim 20, wherein the transaction
information and consumer information is converted into unique transaction fingerprints and
unique member fingerprints by using a one-way hash function.